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Product datasheet for MR207871

Slc2a1 (NM_011400) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Slc2a1 (NM_011400) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Slc2a1
Synonyms:	Glut-1; Glut1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR207871 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGATCCCAGCAGCAAGAAGGTGACGGGCCGCCTCATGTTGGCTGTGGGAGGAGCAGTGCTCGGATCAC
TGCAGTTCGGCTATAACACTGGTGTCATCAACGCCCCCCAGAAGGTTATTGAGGAGTTCTACAATCAAAC
ATGGAACCACCGCTACGGAGAGCCCATCCCATCCACCACACTCACCACGCTTTGGTCTCTCTCCGTGGCC
ATCTTCTCTGTCGGGGGCATGATTGGTTCCTTCTCTGTCGGCCTCTTTGTTAATCGCTTTGGCAGGCGGA
ACTCCATGCTGATGATGAACCTGTTGGCCTTTGTGGCTGCTGTGCTTATGGGCTTCTCCAAACTGGGCAA
GTCCTTTGAGATGCTGATCCTGGGCCGCTTCATCATCGGTGTGTACTGCGGCCTGACTACTGGCTTTGTG
CCCATGTATGTGGGAGAGGTGTCACCTACAGCTCTACGTGGAGCCCTAGGCACACTGCACCAGCTGGGAA
TCGTCGTTGGCATCCTTATTGCCCAGGTGTTTGGCTTAGACTCCATCATGGGCAATGCAGACTTGTGGCC
TCTGCTGCTCAGTGTCATCTTCATCCCAGCCCTGCTACAGTGTATCCTGTTGCCCTTCTGCCCCGAGAGC
CCCCGCTTCCTGCTCATCAATCGTAACGAGGAGAACCGGGCCAAGAGTGTGCTGAAGAAGCTTCGAGGGA
CAGCCGATGTGACCCGAGACCTGCAGGAGATGAAAGAAGAGGGTCGGCAGATGATGCGGGAGAAGAAGGT
CACCATCTTGGAGCTGTTCCGCTCACCCGCCTACCGCCAGCCCATCCTCATCGCTGTGGTGCTGCAGCTG
TCCCAGCAGCTGTCGGGTATCAATGCTGTGTTCTACTACTCAACGAGCATCTTCGAGAAGGCAGGTGTGC
AGCAGCCTGTGTACGCCACCATCGGCTCCGGTATCGTCAACACGGCCTTCACTGTGGTGTCGCTGTTTGT
TGTAGAGCGAGCTGGACGACGGACCCTGCACCTCATTGGCCTGGCTGGCATGGCAGGCTGTGCTGTGCTC
ATGACCATCGCCCTGGCCTTGCTGGAACGGCTGCCTTGGATGTCCTATCTGAGCATCGTGGCCATCTTTG
GCTTTGTGGCCTTCTTTGAAGTAGGCCCTGGTCCTATTCCATGGTTCATTGTGGCCGAGCTGTTCAGCCA
GGGGCCCCGTCCTGCTGCTATTGCTGTGGCTGGCTTCTCCAACTGGACCTCAAACTTCATTGTGGGCATG
TGCTTCCAGTATGTGGAGCAACTGTGCGGCCCCTACGTCTTCATCATCTTCACGGTGCTCCTCGTGCTCT
TCTTCATCTTCACCTACTTCAAAGTCCCTGAGACCAAAGGCCGAACCTTCGATGAGATCGCTTCCGGCTT
CCGGCAGGGGGGTGCCAGCCAAAGTGACAAGACACCCGAGGAGCTCTTCCACCCTCTGGGGGCGGACTCC
CAAGTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

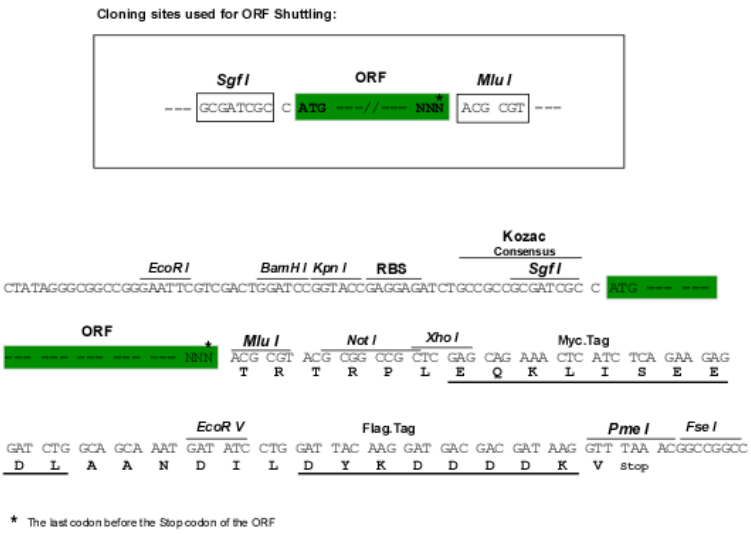
>MR207871 protein sequence
Red=Cloning site Green=Tags(s)

MDPSSKKVTGRLMLAVGGAVLGSLQFGYNTGVINAPQKVIEEFYNQTWNHRYGEPIPSTTLTTLWSLSVA
IFSVGGMIGSFSVGLFVNRFGRRNSMLMMNLLAFVAAVLMGFSKLGKSFEMLILGRFIIGVYCGLTTGFV
PMYVGEVSPTALRGALGTLHQLGIVVGILIAQVFGLDSIMGNADLWPLLLSVIFIPALLQCILLPFCPES
PRFLLINRNEENRAKSVLKKLRGTADVTRDLQEMKEEGRQMMREKKVTILELFRSPAYRQPILIAVVLQL
SQQLSGINAVFYYSTSIFEKAGVQQPVYATIGSGIVNTAFTVVSLFVVERAGRRTLHLIGLAGMAGCAVL
MTIALALLERLPWMSYLSIVAIFGFVAFFEVGPGPIPWFIVAELFSQGPRPAAIAVAGFSNWTSNFIVGM
CFQYVEQLCGPYVFIIFTVLLVLFFIFTYFKVPETKGRTFDEIASGFRQGGASQSDKTPEELFHPLGADS
QV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_011400

ORF Size: 1476 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info

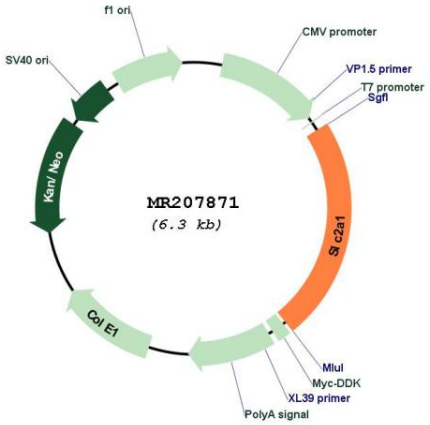
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_011400.3
RefSeq Size:	2573 bp
RefSeq ORF:	1479 bp
Locus ID:	20525
UniProt ID:	P17809
Cytogenetics:	4
MW:	54 kDa
Gene Summary:	Facilitative glucose transporter, which is responsible for constitutive or basal glucose uptake (PubMed:17320047). Has a very broad substrate specificity; can transport a wide range of aldoses including both pentoses and hexoses (By similarity). Most important energy carrier of the brain: present at the blood-brain barrier and assures the energy-independent, facilitative transport of glucose into the brain (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR207871